

home residents 65 years or older from four states. New typical and atypical users in nursing homes were followed for up to six month after the exposure without censoring. The risk of death was modeled using Cox proportional model and extended Cox hazard model stratified on matched pairs based on propensity score. **RESULTS:** The unadjusted mortality rate was 19.22% for atypical antipsychotic users and 24.27 % for typical antipsychotic users. Cox proportional hazard model revealed significant increased risk of death [Hazard Ratio (HR) 1.35, 95%; Confidence Interval (CI) 1.30–1.63] among typical users when compared to atypical users. The extended Cox model, used due to the violation of proportional hazards assumption, revealed that risk of death is twice greater among typical antipsychotic users during the initial 40 days after the start of antipsychotic treatment [HR 2.06, 95%; CI 1.82–2.32] when compared to atypical users. However, no significant differences were found after 40 days of antipsychotic exposure. **CONCLUSIONS:** The use of typical antipsychotic agents was associated with increased risk of death among aged dual eligible beneficiaries when compared to atypical use, especially within 40 days of treatment, possibly due to their underlying health status.

PMH10

THE INFLUENCE OF COMORBID ANXIETY ON MEDICATION USE AND SERVICE UTILIZATION AMONG PATIENTS WITH MAJOR DEPRESSIVE DISORDER: RESULTS FROM A RETROSPECTIVE CLAIMS DATABASE

Wu CH, Farley J

University of North Carolina, Chapel Hill, NC, USA

OBJECTIVES: The objectives are to estimate the prevalence of comorbid anxiety and to compare the influence of comorbid anxiety on medication adherence and health resource utilization among privately insured individuals with Major Depressive Disorder (MDD). **METHODS:** Patients with MDD between 18 and 64 years of age newly initiating an antidepressant between July 1, 2005, and December 31, 2006, were identified from the MarketScan Commercial Claims database. MDD patients were defined as having comorbid anxiety if they were concurrently diagnosed with generalized anxiety disorder (GAD), panic disorder (PD), or social anxiety disorder (SAD). We used a retrospective cohort study design to compare the effect of comorbid anxiety disorder on antidepressant adherence measured as proportion of days covered (PDC), adherence (PDC $\geq 80\%$), and presence of emergency room (ER) visit or inpatient encounters. Student t-tests were used to compare adherence rates and logistic regressions were used to compare health service utilization (ER visit and hospitalization) between patients with and without comorbid anxiety disorder. **RESULTS:** Of 71,467 adults with MDD, 8.4% had GAD, 7.1% had PD, and 6.1% had SAD. The mean value of PDC among the study population was 0.56. MDD patients with comorbid anxiety had significantly higher PDC value than patients without comorbid anxiety (0.58 vs. 0.56, $p < 0.01$). MDD patients with comorbid anxiety were more likely to have mental health-related ER visits than patients without comorbid anxiety after adjusting for age, gender, Charlson comorbidity index, and covariates associated with prior health care utilization (OR = 1.16, 95%CI = 1.10–1.22). However, there was no difference between patients with and without comorbid anxiety in the probability of hospitalization. **CONCLUSIONS:** MDD patients with comorbid anxiety had higher mental health-related ER visits. Clinicians treating patients with MDD should consider the role of comorbid anxiety on medication adherence and clinical outcomes.

PMH11

PERFORMANCE OF RISK ADJUSTMENT SCALES IN PREDICTING RISK OF HOSPITALIZATION AMONG DEMENTIA PATIENTS: A MEPS STUDY

Bhowmik D, Mehta S, Chitnis A, Dwibedi N, Kamble P, Johnson ML

University of Houston, Houston, TX, USA

OBJECTIVES: To evaluate performances of various risk adjustment scales in predicting risk of hospitalization in patients diagnosed with dementia. **METHODS:** This cross-sectional study was conducted using the household and medical provider component files of Medical Expenditure Panel Survey (MEPS) data from 2000 to 2003 (panel 5, 6, and 7). Dementia patients were identified using cccodex and International Classification of Diseases, 9th Revision, Clinical Modification (ICD-9CM) codes, and all cause hospitalizations were recorded from the inpatient files. The risk adjustment scales evaluated in this study were: diagnosis based scales (identified using ICD-9CM codes): D'Hoore's adaptation of Charlson comorbidity index (CCI), and Elixhauser comorbidity algorithm; and prescription based scales (identified using national drug codes): chronic disease scores (CDS-1 and CDS-2). Logistic regression models were constructed with all-cause hospitalization as binary outcome, adjusting for demographic, socio-economic (insurance, income, geographic region), and perceived health status covariates, and risk adjustment algorithms. Performance of the models in predicting hospitalization was measured by c-index. **RESULTS:** Total 392 dementia patients were identified from the household component files during the study period. Most of the patients were male (68.58%), white (54.11%), elderly (mean age 73 years), and from a low income family (59.85%); and almost half of them had an inpatient visit (46.70%). Baseline logistic model with the covariates only predicted hospitalization risk reasonably well ($c = 0.602$). Performance of risk adjustment models after adjusting for covariates were as follows- D'Hoore: $c = 0.688$, Elixhauser: $c = 0.691$, CDS-1: $c = 0.666$, CDS-2: $c = 0.733$, CDS-1+D'Hoore: $c = 0.687$, CDS-1+Elixhauser: $c = 0.709$, CDS-2+D'Hoore: $c = 0.752$, and CDS-2+Elixhauser: $c = 0.757$. **CONCLUSIONS:** Diagnosis based scales performed better than CDS-1 scale in predicting hospitalization. CDS-2 which is a comorbidity algorithm modified from CDS-1 to efficiently model healthcare utilization and cost performed superiorly. Among the combinations of diagnosis and prescription based scales CDS-2+Elixhauser predicted hospitalization risk most efficiently.

PMH12

THE PROFILE OF IMPAIRMENTS TO ATTENTION AND EPISODIC RECOGNITION MEMORY IN MILD COGNITIVE IMPAIRMENT AND ALZHEIMER'S DISEASE

Wesnes K¹, Lenderking WR²

¹UBC, Goring-on-Thames, UK, ²UBC, Lexington, MA, USA

OBJECTIVES: Automated tests can assess aspects of cognitive function which cannot be assessed using traditional non-automated techniques. To build on previous findings that patients with minimal cognitive impairment show slower information retrieval (Nicholl et al, 1995), the present analysis compared 74 patients with amnesic Mild Cognitive Impairment (MCI) to healthy controls ($n = 1409$), and patients with mild, moderate and moderately-severe Alzheimer's disease (AD; $n = 764$). **METHODS:** Three CDR System tests of attention were administered (digit vigilance, simple and choice reaction time) and two episodic memory tests (word and picture recognition). For attention Power of Attention (the ability to focus attention) and Continuity of Attention (the ability to sustain attention) were used. For recognition, the abilities to correctly identify previous stimuli and reject novel stimuli were analysed, as was speed of response. **RESULTS:** For Power of Attention, and Word and Picture Recognition Speed, there was a clear continuum of decline from normals through AD. For Continuity of Attention, Word Recognition Accuracy, and the ability to recognise previous pictures, MCI subjects demonstrated preserved functioning equivalent to controls. For the ability to reject novel pictures, MCI patients showed deficits comparable to moderate AD patients. The ability to reject novel pictures is related to activity in the cingulate gyrus, and the impairment in MCI suggests disruptions to this area, which may have consequences for neurogenesis. Overall, the pattern of decline is not consistent across all cognitive functions assessed. **CONCLUSIONS:** These findings will be discussed in terms of the likelihood that amnesic MCI is a prodrome of AD, which may be the case for episodic memory as assessed by delayed word recall, but not necessarily for aspects of episodic recognition memory or the ability to sustain attention. This may have implications for treatment of early disease, as well as prevention strategies.

PMH13

COMPARATIVE EFFECTIVENESS STUDY OF RISPERIDONE LONG-ACTING INJECTABLE: THE USE OF DYNAMIC EXPOSURE METHODOLOGY FOR RISK SHARING AGREEMENT

Grimaldi-Bensouda L¹, Rouillon F², Abenham L³

¹LA-SER Europe, Paris, France, ²Saint Anne Hospital, Paris, France, ³London School of Hygiene and Tropical Medicine, London, UK

Risperidone long-acting injectable (R-LAI) was the first of the 'atypical' antipsychotic drugs with delayed release to be marketed worldwide for the treatment of schizophrenia. This strategy was envisaged to deliver a primary advantage over conventional oral drugs but could not be demonstrated ahead of marketing approval as R-LAI was mainly assessed against placebo for that purpose. A risk-sharing agreement was reached between the manufacturer and the French National Health Pricing Authority – The Economic Committee on Health Care Products (CEPS), under which coverage would be ensured following demonstration of cost minimization in real terms. **OBJECTIVES:** To assess whether R-LAI use was associated with a decreased risk of hospitalization and provide data for risk-sharing agreement and coverage. **METHODS:** A cohort with a 'dynamic exposure' methodology was used to assess the relative effectiveness of R-LAI. A cohort of adult patients with schizophrenia was recruited from 177 psychiatric hospitals across France and observed naturalistically over 12 months. A 3-month granularity was used for treatment characterization. The relative rate of hospitalization was assessed using a Poisson multiple regression model for auto-correlated data (SAS-GENMOD). Results were adjusted with propensity scores using potential confounders of R-LAI use vs. non-use, including history of hospitalization, severity of schizophrenia, and patterns of antipsychotic use. **RESULTS:** The cohort consisted of 1859 patients with 454 person years of R-LAI use, and 1306 person years of R-LAI non-use. R-LAI use was associated with an adjusted rate ratio of hospitalization of 0.66 (95% CI: 0.46–0.96) when compared to non-use and 0.53 (95% CI: 0.32–0.88) when compared to typical LAI antipsychotics. This was found to be associated with better compliance in patients with a history of recurrent hospitalization, and therefore compensated for the costs of treatment. **CONCLUSIONS:** A cohort with dynamic-exposure methodology established a successful risk-sharing agreement for a new treatment for schizophrenia.

PMH14

CLINICAL EFFECTIVENESS ANALYSIS OF NALTREXONE VERSUS ACAMPROSATE AND PLACEBO IN ALCOHOL DEPENDENT PATIENTS TREATED WITH PSYCHOTHERAPY

Jaros J, Miernik K, Wachal M, Walczak J

Arcana Institute, Cracow, Poland

OBJECTIVES: The objective of this study is to assess the clinical effectiveness of naltrexone versus acamprosate and placebo in alcohol dependent patients receiving psychotherapy. **METHODS:** Analysis was conducted in accordance with the principles of systematic review, based on the Cochrane Collaboration guidelines and the guidelines of the Polish Agency for Health Technology Assessment. Calculations were performed using the StatsDirect® 2.6.8 statistical package. The extended evaluation of safety based on sources other than RCTs was performed. **RESULTS:** In the light of the analysis carried out it can be concluded that administered orally plus psychotherapy for alcohol-dependent patients results in a higher clinical effectiveness and comparable safety profile in comparison with acamprosate for a 1-year-long-observation treatment and placebo for both a short (12–16 weeks) and medium-term observation treatment. Statistical significances in favor